

IN THE CLAIMS:

The claims have been amended as follows:

1. (Currently Amended) An image correction method, wherein |
comprising:

performing a first conversion in which digital code values of
each pixel of image data representing an image to be corrected are converted
to values whose relationship with light intensity values or light intensity logarithm
values is linear; ;

performing a second conversion in which at least one of the color or density
of said image to be corrected which is represented by said image data is corrected
after said image data has undergone said first conversion; ; and

a third conversion in which the values of each pixel of said image data are
restored to said digital code values after said image data has undergone said
second conversion,

wherein the image data is corrected without changing the gradation of the
image.

2. (Original) An image correction method according to claim 1, wherein said
image data is obtained by converting values of the light intensity or values related
to the light intensity of each component color of each pixel of said image to be
corrected to digital code values A, B, C in accordance with predetermined
conversion conditions, and wherein, when A', B', C' are values having a linear

relationship with the light intensity values, at least one of said first conversion or said third conversion is performed in accordance with the relational formula

$$A = e (a \cdot A')$$

$$B = e (a \cdot B')$$

$$C = e (a \cdot C')$$

when the digital code values A, B, C are not greater than a predetermined value f, and in accordance with the relational formula

$$A = e (b \cdot A'^c - d)$$

$$B = e (b \cdot B'^c - d)$$

$$C = e (c \cdot C'^c - d)$$

when the digital code values A, B, C are greater than a predetermined value f, where A, b, c, d, e, f are constants.

3. (Original) An image correction method according to claim 1, wherein said second conversion is an affine transformation.

4. (Amended) An image correction device comprising:

first conversion means for performing a first conversion in which digital signal values of each pixel of image data representing an image to be corrected are converted to values whose relationship with light intensity values or light intensity logarithm values is linear;

second conversion means for performing a second conversion in which at least one of the color or density of said image to be corrected which is represented by said image data is corrected after said image data has undergone said first conversion; and

third conversion means for performing a third conversion in which the values of each pixel of said image data are restored to said digital signal values after said image data has undergone said second conversion.

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wherein the image correction device corrects the image without changing the gradation of the image.

5. (Previously Amended) A recording medium on which is recorded a program for executing on a computer a process including:

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a first step for carrying out a first conversion in which digital signal values for each pixel of image data representing an image to be corrected are each converted to values whose relationship with the light intensity values or the light intensity logarithm values is linear;

a second step for carrying out a second conversion in which at least one of the colors or density of said image to be corrected which is represented by said image data is corrected; and

a third step for carrying out a third conversion in which the values of each pixel of image data which has undergone said second conversion are restored to said digital signal values,

wherein image data is corrected without changing the gradation of the image.

Please add the following claims:

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--6. (New) The image correction method according to claim 1, wherein the step of performing the first conversion includes correcting each component color of each pixel of image data representing an image to be corrected to values whose relationship with light intensity values or light intensity logarithm values is linear.

7. (New) The image correction device of claim 4, wherein the first conversion means converts digital signal values of each component color of each pixel of

image data representing an image to be corrected are converted to values whose relationship with light intensity values or light intensity logarithm values is linear.

8. (New) The recording medium of claim 5, wherein the first step includes carrying out the first conversion in which digital signal values for each pixel of image data representing an image to be corrected are each converted to values whose relationship with the light intensity values or the light intensity logarithm values is linear. --
